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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/527,893

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Gavin Nicholas Phillips

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS

P.O. BOX 3001

BRIARCLIFF MANOR, NY 10510

EXAMINER

BERNATZ, KEVIN M

ART UNIT

PAPER NUMBER

1794

MAIL DATE

DELIVERY MODE

10/11/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/527,893	Applicant(s) PHILLIPS, GAVIN NICHOLAS	
	Examiner Kevin M. Bernatz	Art Unit 1773	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 July 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>9/12/05</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Examiner Comments

1. Regarding the limitation(s) "adjacent" in claims 1 - 20, the Examiner has given the term(s) the broadest reasonable interpretation(s) consistent with the written description in Applicants' specification as it would be interpreted by one of ordinary skill in the art. *In re Morris*, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027 (Fed. Cir. 1997); *In re Donaldson Co., Inc.*, 16 F.3d 1190, 1192-95, 29 USPQ2d 1845, 1848-50 (Fed. Cir. 1994). See MPEP 2111. Specifically, the Examiner notes that "adjacent" still is deemed to allow for intervening layers and is of different scope than the limitation "directly adjacent", which excludes additional elements/layers from being located between the "directly adjacent" layers.

Drawings

2. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated (*specification, page 6*). See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1 – 20 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. The metal layers being *directly* adjacent the reproduction layer is deemed critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure (*specification, pages 7 - 8*). See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). The Examiner notes that the broadest reasonable interpretation of the limitation “adjacent” still allows for additional layers to be located therebetween (see above).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1 – 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicants' admissions in view of Yamada et al. (U.S. Patent No. 4,975,339).

Regarding claims 1 – 8, Applicants' admit the general structure of a substrate layer, a reflection layer, a first dielectric layer, a magnetic storage layer, a separation

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layer, a magnetic reproduction layer, a second dielectric layer, and a cover layer as known in the art for a "typical MAMMOS medium" (*Figure 1 and pages 6 – 7*).

Applicants' admissions fail to disclose either a first or second metal layer formed adjacent to the magnetic reproduction layer.

However, Yamada et al. teach that it is known in the art to form metal layers (*Figure 1, elements 6 and 7*) adjacent a magneto-optic layer (*element 4*) in order to provide improved oxidation and corrosion resistance (*col. 1, line 60 bridging col. 2, line 45*).

It would therefore have been obvious to one of ordinary skill in the art at the time of the Applicants' invention to modify the device that Applicants' admit is old in the art to include metal layers adjacent the magnetic reproduction layer as taught by Yamada et al. in order to provide improved corrosion and oxidation resistance to the magnetic reproduction layer.

Regarding claims 9 - 11, Yamada et al. disclose metal layers meeting Applicants' claimed limitations (*col. 2, lines 19 – 65; col. 3, lines 19 – 24; and col. 4, lines 19 – 43*).

Regarding claim 12, Applicants' admit that dielectric separation layers are known in the art as "typical MAMMOS" separation layers (*page 7*).

The limitation(s) of claims 13 – 20 are intended use limitations and are not further limiting in so far as the structure of the product is concerned. Note that "in apparatus, article, and composition claims, intended use must result in a **structural difference** between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. ***If the prior art structure is capable of***

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performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art." [emphasis added] *In re Casey*, 370 F.2d 576, 152 USPQ 235 (CCPA 1967); *In re Otto*, 312 F.2d 937, 938, 136 USPQ 458, 459 (CCPA 1963). See MPEP § 2111.02.

Furthermore, regarding the limitations in claims 13 – 15, Applicants are reminded that an invention may be obvious if the prior art has different reasons for doing what the applicant has done. "It has long been held that a rejection under 35 USC 103 based upon a combination of references is not deficient solely because the references are combined based upon a reason or technical consideration which is different from that which resulted in the claimed invention." *Ex parte Raychem Corp.* 17 USPQ 2d 1417, 1424 (BPAI 1990). Cites *In re Kronig* 190 USPQ 425 (CCPA 1976); *In re Gershon* 152 USPQ 602 (CCPA 1967).

In addition, regarding the limitations of claims 16 – 20, the Examiner notes that Applicants' admit that all of these systems are known in the art (*page 1 of specification*), and as such, any implied structural differences are deemed to be within the knowledge of one of ordinary skill in the art at the time of Applicants' invention.

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7. Claims 1, 2, 5, 6, 9, 10 and 12 – 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicants' admissions in view of Hirokane et al. (U.S. Patent No. 6,278,668 B1).

Regarding claims 1, 2, 5 and 6, Applicants' admit the general structure of a substrate layer, a reflection layer, a first dielectric layer, a magnetic storage layer, a separation layer, a magnetic reproduction layer, a second dielectric layer, and a cover layer as known in the art for a "typical MAMMOS medium" (*Figure 1 and pages 6 – 7*).

Applicants' admissions fail to disclose either a first metal layer formed adjacent to the magnetic reproduction layer and inter-located between the storage layer and the reproduction layer.

However, Hirokane et al. teach a MAMMOS medium including a supplemental reproduction layer meeting Applicants' claimed structural and material limitations (*Figures, element 2 and relevant disclosure thereto; col. 1, lines 38 – 46; and col. 14, lines 21 – 28*), wherein such a layer allows for high reproduction resolution (*col. 5, line 42 bridging col. 6, line 8*).

It would therefore have been obvious to one of ordinary skill in the art at the time of the Applicants' invention to modify the device that Applicants' admit is old in the art to include a metal layer meeting Applicants' claimed structural and material limitations as taught by Hirokane et al. in order to provide for high reproduction resolution.

Regarding claims 9 and 10, Hirokane et al. disclose metal layers meeting Applicants' claimed limitations (*col. 14, lines 21 - 28*).

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Regarding claim 12, Applicants' admit that dielectric separation layers are known in the art as "typical MAMMOS" separation layers (page 7).

The limitation(s) of claims 13 – 20 are intended use limitations and are not further limiting in so far as the structure of the product is concerned. Note that "in apparatus, article, and composition claims, intended use must result in a **structural difference** between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. ***If the prior art structure is capable of performing the intended use, then it meets the claim.*** In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art." [emphasis added] *In re Casey*, 370 F.2d 576, 152 USPQ 235 (CCPA 1967); *In re Otto*, 312 F.2d 937, 938, 136 USPQ 458, 459 (CCPA 1963). See MPEP § 2111.02.

Furthermore, regarding the limitations in claims 13 – 15, Applicants are reminded that an invention may be obvious if the prior art has different reasons for doing what the applicant has done. "It has long been held that a rejection under 35 USC 103 based upon a combination of references is not deficient solely because the references are combined based upon a reason or technical consideration which is different from that which resulted in the claimed invention." *Ex parte Raychem Corp.* 17 USPQ 2d 1417, 1424 (BPAI 1990). Cites *In re Kronig* 190 USPQ 425 (CCPA 1976); *In re Gershon* 152 USPQ 602 (CCPA 1967).

In addition, regarding the limitations of claims 16 – 20, the Examiner notes that Applicants' admit that all of these systems are known in the art (page 1 of specification),

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and as such, any implied structural differences are deemed to be within the knowledge of one of ordinary skill in the art at the time of Applicants' invention.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Awano et al. (U.S. Patent App. No. 2004/0027928 A1) provides supporting evidence that the "typical MAMMOS medium" structure disclosed in Figure 1 and pages 6-7 of the specification is old in the art (*see entire reference, especially Figures 40 and 49 and relevant disclosure thereto*).


9. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Kevin M. Bernatz whose telephone number is (571) 272-1505. The Examiner can normally be reached on M-F, 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the Examiner's supervisor, Carol Chaney can be reached on (571) 272-1284. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KMB

September 26, 2007


Kevin M. Bernatz, PhD
Primary Examiner